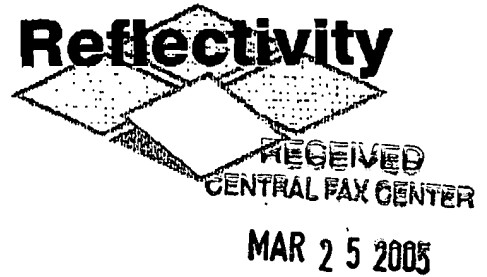


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To: Allan Olsen **From:** Gregory Muir
Fax: 703-872-9306 **Pages:** 7
Phone: **Date:** March 25, 2005
Re: 09/954,864 **CC:**

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We are in receipt of the Notice of Allowance and in reviewing the file we noticed that we have not received back the Information Disclosure Statement PTO 1449 forms that we filed on October 7, 2004. Attached please find the forms. Please sign and send back to us.

Thanks so much!

Gregory R. Muir
Reg No. 35,293

MAR 25 2005

PTO/SB/08A (10-01)

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Substitute for form 1449A/PTD		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/954,864
		Filing Date	9/17/01
		First Named Inventor	Patel
		Art Unit	1763
		Examiner Name	Olsen, Allan
Sheet 1 of 6	Attorney Docket Number	P68-US	

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 3,511,727	05-12-1970	Hays, R.G.	
		US- 4,190,488	02-26-1980	Winters, H.F.	
		US- 4,310,380	12-12-1982	Flemm et al.	
		US- 4,498,933	02-12-1985	Cook et al.	
		US- 6,051,503	04-18-2000	Bhardwal, J.K.	
		US- 6,438,229	08-20-2002	Tal et al.	
		US- 6,182,387	12-19-2000	Tal et al.	
		US- 6,290,664 B1	09-18-2001	Patel et al.	
		US- 6,355,181 B1	03-12-2002	McQuarrie, A.D.	
		US- 2001/0002693 A1	06-07-2001	Tal et al.	
		US- 5,439,553	08-08-1995	Grant et al.	
		US- 2002/0033229 A1	03-21-2002	Loboultz et al.	
		US- 2002/0198524 A1	12-26-2002	Huibers, et al.	
		US- 2003/0054588 A1	03-20-2003	Patel, et al.	
		US- 5,728,480	03-10-1998	Pister, K.S.	
		US- 2002/0185698	12-12-2002	Reid	
		US- 2002/0121502 A1	09-15-2002	Patel, et al.	
		US- 5,835,256	11-10-1998	Huibers, A.	
		US- 2002/0047172 A1	04-25-2002	Reid	
		US- 2003/0186342 A1	08/04/03	Chinn, et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	-Number ⁴ -Kind Code ⁵ (if known)				
		EP	0704884-A2	04-03-1998	Mehta, J.		
		EP	0822582-A2	02-04-1998	Bhardwal, J.K.		
		EP	0822584-A2	04-04-1998	Bhardwal, J.K.		
		WO	99/49308	09-30-1999	McQuarrie, A.D.		
		EP	0878824-A2	11-18-1998	McQuarrie et al.		
		EP	0878824-A3	01-19-2000	McQuarrie et al.		
		JP	1982/5708879-A	08-18-1982	Tsumetoshi, A.		
		JP	1983/58130529-A	08-04-1983	Yoshihiro et al.		
		JP	1985/60057838-A	04-03-1985	Katsumi et al.		
		WO	98/32183	07-23-1998	Tal et al.		

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Substitute for form 1448A/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	09/954,864	
			Filing Date	9/17/01	
			First Named Inventor	Patel	
			Art Unit	1763	
			Examiner Name	Olsen, Allan	
Sheet	2	of	6	Attorney Docket Number	P68-US

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 6,409,878 B1	06-25-2002	McQuarrie, et al.	
		US- 6,396,619 B1	05-28-2002	Huibers, et al.	
		US- 6,578,489 B2	06/10/03	Laung, et al.	
		US- 6,238,581	05-29-2001	Hawkins, et al.	
		US- 6,115,172	09-05-2000	Jeong	
		US- 6,204,080	03-20-2001	Hwang	
		US- 2003/0071015 A1	04/17/03	Chinn, et al.	
		US- 2002/0184879 A1	11/07/02	Laung, et al.	
		US- 2002/0183051 A1	11/07/02	Gosai, et al.	
		US- 2003/0077878 A1	04/24/03	Kumar, et al.	
		US- 6,197,610 B1	03/06/2001	Toda	
		US- 6,500,356 B2	12/31/02	Goto, et al.	
		US- 2003/0124848 A1	07/03/03	Chinn, et al.	
		US- 2003/0219968 A1	11/27/03	Raltner, et al.	
		US- 4,551,197	11/05/85	Gulimette, et al.	
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FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No.	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		JP-1997/09251981-A	09-22-1997	Kazuki et al.	
		JP-1998/10313128-A	11-24-1998	Hanmin et al.	
		JP-1998/10317169-A	12-02-1998	McQuarrie et al.	
		JP-1988/61187238-A	08-20-1988	Nobuo et al.	
		JP-1988/61270830-A	12-01-1988	Yori, T.	
		JP-1987/62071217-A	04-01-1987	Toru et al.	
		JP-1988/63155713-A	08-28-1988	Tedashi, F.	
		JP-1988/61053732-A	03-17-1988	Arata et al.	
		JP-1988/61134019-A	06-21-1988	Shinji et al.	
		JP-1988/61181131-A	08-13-1988	Shinji et al.	

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	08/954,884
		Filing Date	9/17/01
		First Named Inventor	Patel
		Group Art Unit	1763
		Examiner Name	Olsen, Allan
Sheet 4 of 6	Attorney Docket Number	P68-US	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		ALIEV et al., "Development of Si(100) Surface Roughness at the Initial Stage of Etching in F2 and XeF2 Gases Ellipsometric Study", Surface Science 442 (1999), pp. 206-214.	
		GLIDEMEISTER, J.M., "Xenon Difluoride Etching System" (Nov. 17, 1997).	
		HASUKA et al., "Dominant Overall Chemical Reaction in a Chlorine Trifluoride-Silicon-Nitrogen System at Atmospheric Pressure", Japan Journal of Applied Physics Vol. 38 (1999), pp. 6466-6469.	
		HECHT et al., "A Novel X-ray Photoelectron Spectroscopy Study of the Al/SiO2 Interface", J. Appl. Phys. Vol. 57 (June 15, 1985), pp. 5258-5261.	
		HOULE, F.A., "Dynamics of SiF4 Desorption During Etching of Silicon by XeF2", IBM Almaden Research Center (April 15, 1987), pp. 1866-1872.	
		FLAMM et al., "XeF2 and F-Atom Reactions with Si: Their Significance for Plasma Etching", Solid State Technol. 28, 117 (1983).	
		IBBOTSON et al., "Plasmaless Dry Etching of Silicon with Fluorine-containing Compounds", J. Appl. Phys. Vol. 66 No. 10 (Nov. 1984), pp. 2939-2942.	
		IBBOTSON et al., "Comparison of XeF2 and F-atom Reactions with Si and SiO2", Applied Physics Letter, Vol. 44, 1129 (1984).	
		STRELLER et al., "Selectivity in Dry Etching of Si (100) and XeF2 and VUV Light", Elsevier Science B.V., Applied Surface Science Vol. 106 (1995), pp. 341-346.	
		VUGTS et al., "Si/XeF2 Etching: Temperature Dependence", J. Vac. Sci. Technol. A 14(5) (Sep/Oct 1996), pp. 2766-2774.	
		WINTERS, H.F., "Etch Products from the Reaction of XeF2 with SiO2, SiO3, Si3N4, SiC, and Si in the Presence of Ion Bombardment", J. Vac. Sci. Technol. B 1(4) (Oct/Dec 1983), pp. 927-931.	

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Substitute for form 1445B/PTO		Complete if Known	
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		Filing Date	9/17/01
		First Named Inventor	Patel
		Group Art Unit	1763
		Examiner Name	Olsen, Allan
Sheet	5	of	6
		Attorney Docket Number	P68-US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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		Kurt Williams, Etch Rates for Micromachining Processing-Part II, 2003 IEEE, Pgs 761-778, Journal of Microelectromechanical Systems, Vol. 12, No. 6, December 2003.	
		WINTERS et al., "The Etching of Silicon with XeF ₂ Vapor", Appl. Phys. Letters, Vol. 34(1) (January 1, 1979), pp. 70-73.	
		XACTIX, Inc., Marketing Brochure (June 27, 1999).	
		"Xenon Difluoride Isotropic Etch Systems: Seeing is Believing", Surface Technology Systems Ltd, brochure, Newport, UK (date unknown).	
		CHU et al., "Controlled Pulse-Etching with Xenon Difluoride", International Solid State Sensors and Actuators Conference (Transducers '97), Chicago, IL, Vol. 1 (June 16 - 19, 1997), pp. 665-668 (abstract only).	
		BASSOM et al., "Modeling and Optimizing XeF ₂ -enhanced FIB Milling of Silicon", 25th International Symposium for Testing and Failure Analysis, Santa Clara, CA (Nov. 14 - 18, 1999), pp. 255-261 (abstract only).	
		KOHLER et al., "Fabrication of Microchannels by Plasmaless Isotropic Etching Combined with Plastic Moulding", Sens. Actuators A, Phys. (Switzerland), Vol. A53, No. 1-3 (May 1996), pp. 361-363 (abstract only).	
		CHAN et al., "Gas Phase Pulse Etching of Silicon for MEMS with Xenon Difluoride", Engineering Solutions for the Next Millennium: 1999 IEEE Canadian Conference on Electrical and Computer Engineering, Edmonton, Alberta, Vol. 3 (May 8 - 12, 1999), pp. 1637-1642 (abstract only).	
		CHANG et al., "Gas-Phase Silicon Micromachining with Silicon Difluoride", Proceedings of the SPIE - The International Society for Optical Engineering, Vol. 2641 (1995), pp. 117-128 (abstract only).	

Examiner Signature	Date Considered
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Substitute for form 1449B/PTO.		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/954,864
		Filing Date	8/17/01
		First Named Inventor	Patel
		Group Art Unit	1763
		Examiner Name	Olsen, Allan
Sheet 6 of 6	Attorney Docket Number	P88-US	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Y2
		SEBEL et al., "Reaction Layer Dynamics in Ion-Assisted Si/XeF ₂ Etching: Temperature Dependence", J. Vac. Sci. Technol. A, Vac. Surf. Films, Vol. 18, No. 6, (Nov. 2000), pp. 2769-2789 (abstract only).	
		SEBEL et al., "Silicon Etch Rate Enhancement by Traces of Metal", J. Vac. Sci. Technol. A, Vac. Surf. Films, Vol. 17, No. 3, (May/June 1999), pp. 755-762 (abstract only).	
		SUGANO et al., "Study on XeF ₂ Pulse Etching Using Wagon Wheel Pattern", Proceedings of the 1999 International Symposium on Micromechanics and Human Science: Towards the New Century, Nagoya, Japan (Nov. 23 - 26, 1999), pp. 163-167 (abstract only).	
		WANG et al., "Gas-Phase Silicon Etching with Bromine Trifluoride", International Solid State Sensors and Actuators Conference (Transducers '97), Chicago, IL, Vol. 2 (June 16 - 19, 1997), pp. 1505-1508 (abstract only).	
		MUTHUKUMARAN et al., "Gas-Phase Xenon Difluoride Etching of Microsystems Fabricated Through the Mitel 1.5-μm CMOS Process", Can. J. Electr. Comput. Eng. (Canada), Vol. 25, No. 1 (Jan. 2000), pp. 35-41 (abstract only).	
		TODA et al., "Thin Beam Bulk Micromachining Based on RIE and Xenon Difluoride Silicon Etching", International Solid State Sensors and Actuators Conference (Transducers '97), Chicago, IL, Vol. 1 (June 16 - 19, 1997), pp. 671-674.	
		SEBEL et al., "Etching of Si Through a Thick Condensed XeF ₂ Layer", J. Vac. Sci. Technol. A, Vac. Surf. Films, Vol. 18, No. 5 (Sep/Oct 2000), pp. 2090-2097 (abstract only).	

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